

PREVALENCE AND TREATMENT OF SUBSTANCE ABUSE IN THE CALIFORNIA POPULATION

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Outline of Testimony
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I. Issues in Estimating the Prevalence of Substance Abuse

- A. *Natural History of Substance Abuse*
- B. *Substance Use vs. Substance Abuse*
- C. *Surveys and Individuals With Severe Substance Use Disorders*

II. Review of Studies of the Prevalence of Substance Abuse in California and the West

- A. *California Household Substance Use Survey (1996)*
- B. *National Household Survey on Drug Abuse (1999)*
 - 1. Alcohol
 - 2. Tobacco
 - 3. Illicit Drugs

III. Substance Abuse Treatment in California (Treatment Episode Data Set 1999)

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CAPABILITIES

SERVICE

- Policy and performance analysis and refinement of public and private sector adult and juvenile mental health, substance abuse and health care systems combining different funding streams, provider systems, data systems; data mining, data analysis, cross system planning and quality management.
- Mental health and substance abuse policy and financial analysis, policy research on Medicaid and non-Medicaid managed care, behavioral clinical, funding and data issues, and special population assessment, including specific expertise in adult and juvenile mental health, criminal justice/TASC/drug courts, substance abuse, corrections, urban/rural and women's issues.
- Re-engineering health plans and provider systems' behavioral health capabilities

TYPICAL CLIENTS

- Public and private sector provider, health plan and insurance organizations; governmental mental health and substance abuse planning and regulatory agencies, national foundations, national managed care firms and Blue Cross plans.
- Federal, county and state agencies in California and other states, several national foundations, national managed care and managed behavioral health organizations, large employer coalitions and several health plans, SAMHSA
- Academic and hospital psychiatry departments, behavioral health components of HMO's, health systems, accreditation entities, public health authorities, SAMHSA

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- Pharmacoeconomic analyses
- Behavioral health capacity analysis; rebuilding and re-engineering
- Field research design, analysis, proposal writing and data analysis, consulting to evaluators and chief executives of managed care and managed behavioral health systems
- Public sector behavioral health
- Managed care readiness assessment and staff training in best practices, quality management and evidence-based care; executive level and organization-wide
- Expert consultation, substance abuse and mental health financing issues and policy review
- Behavioral health system building, development, implementation, planning and monitoring/self-evaluation
- Federal government, selected pharmaceutical manufacturers
- Public sector and private sector purchasers and clinicians, HMO's, hospital systems, health policy institutes, public sector agencies, foundations
- Academic and private sector policy research institutes and firms, State and County health and behavioral health departments, SAMHSA and other Federal agencies
- Federal, State and County governments; policy research, universities and consulting firms
- Federal, State and County governments, universities, voluntary organizations in health, substance abuse and social services
- Federal, State and local government; managed care organizations, Blue Cross plans, employer consortia
- Private and public sector clients

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SUBSTANCE USE IN CALIFORNIA: WHO USES, WHO ABUSES AND WHO GETS TREATMENT

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SUBSTANCE USE IN CALIFORNIA: WHO USES, WHO ABUSES AND WHO GETS TREATMENT

Substance abuse is a public policy, public health and legal issue that commands wide public attention but also provokes a great deal of controversy that sometimes occurs in an information vacuum. The purpose of this presentation is to provide some evidence and analysis about substance abuse in California so as to construct a common foundation for improved planning and priority setting. Substance use, abuse and treatment involves every ethnic and social group in California and includes use and abuse of alcohol as well as illicit drugs.

Prevalence of Substance Abuse in California

One of the first things that policymakers need to know is that there is only a limited amount of good information about substance abuse. Available information is typically narrow in scope and not available in as timely a fashion as policymakers would like. The most recent data available about the prevalence of alcohol and drug abuse in California comes from the National Household Survey on Drug Abuse (NHDSA), conducted in 1999¹. Estimates based on this survey found that 825,000 Californians aged 12 and over used an illicit drug other than marijuana (cocaine, crack-cocaine, inhalants, hallucinogens, heroin, or any prescription-type psychotherapeutic used non-medically) in the month prior to the survey and 4,790,000 Californians reported having engaged in "binge" drinking of alcohol in the month prior to the survey. The corresponding population-based rates for illicit drugs other than marijuana are somewhat higher than the national average, although the difference is not statistically significant. For "binge" drinking, the rate for Californians is somewhat below the national average, and significantly so for individuals in the age group of 18-25, the age group with the highest rate of binge drinking.

PERCENTAGE OF POPULATION

SUBSTANCE	TOTAL	AGE GROUP (YEARS)		
		12 – 17	18 – 25	26 OR OLDER
Past Month Use of any Illicit Drug Other Than Marijuana				
California	3.2%	4.6%	5.8%	2.6%
United states	2.8%	4.5%	6.0%	2.1%

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SUBSTANCE	TOTAL	AGE GROUP (YEARS)		
		12 – 17	18 – 25	26 OR OLDER
Past Month “Binge” Alcohol Use				
California	18.8%	9.5%	33.5%*	17.5%
United states	20.2%	10.1%	37.8%	18.6%

- Significantly different from national average.

Interestingly, adult Californians use alcohol and marijuana at a rate somewhat higher than the national average.

PERCENTAGE OF POPULATION

SUBSTANCE	TOTAL	AGE GROUP (YEARS)		
		12 – 17	18 – 25	26 OR OLDER
Past Month Alcohol Use				
California	47.4%	16.1%	52.5%	51.0%
United states	46.4%	16.6%	56.7%	48.7%
Past Month Marijuana Use				
California	6.0%	7.7%	14.0%	4.3%*
United states	4.9%	7.4%	14.2%	3.0%

- Significantly different from national average.

It is important to note that the methods used in any survey determine how the results should be used, particularly when studying the use of illicit drugs. The NHSDA collects information using face-to-face interviews from residents of households, non-institutional group quarters (e.g., shelters, rooming houses, dormitories), and civilians living on military bases. However, the survey excludes active military personnel, who have been shown to have significantly lower rates of illicit drug use. Persons living in institutional group quarters, such as prisons and residential drug treatment centers, are also not included in the NHSDA and have been shown in other surveys to have higher rates of illicit drug use. Also excluded are homeless persons not living in a shelter on the survey date, another population shown to have higher than average rates of illicit drug use. Moreover, NHSDA estimates are based on self-reports of drug use, and their value depends on respondents' truthfulness and memory. Although many studies have generally established the validity of self-report data and the NHSDA procedures were designed to encourage honesty and recall, some degree of underreporting is assumed. This is particularly true for adolescents living at

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home, who may not answer honestly in order to conceal use from their parents. In general, even the best surveys, such as this one, will underestimate the rate of substance abuse.

Treatment Need in California

Developing estimates of treatment need from surveys of substance use requires additional information and assumptions. The California Household Substance Use Surveyⁱⁱ, conducted in 1995-1996, found that the proportion of adults in California in need of some sort of intervention, based on an assessment of problem use in the prior twelve months, ranged from 4.8% to 8.0% of the California population, depending on the criteria employed. This figure is derived from a telephone survey of households with telephones in California, so this methodology excluded both institutional and non-institutional group quarters, and thus excluded from the survey sample groups with severe substance abuse disorders. Again, the "true" rate of substance abuse is unknown and under-reported.

We do know that more than 12% of the sample met the DSM-III-R criteria for having had a substance use disorder sometime in their livesⁱⁱⁱ. Among this 12 percent, 78% reported having a disorder that involved alcohol only. Only 1% of respondents met the criteria for a disorder involving other drug use only, and 1.7% met the criteria for ever having had a disorder involving both alcohol and other drug use problems.

Compared to the 12% who met the criteria for having a substance use disorder sometime in their lives, only 3% of respondents reported ever having been in a formal alcohol or drug treatment program in their lives. However, 6% had been in a 12-step program at some time in their lives. The difference between the number of individuals who met criteria and those who received treatment in the formal system is called the treatment gap.

About 10% of telephone respondents said that they had had a problem with alcohol and/or drugs in their lifetime, but reported no such problems in the past 12 months. This group included both those who abstained from any use and those who continued some use of alcohol and/or drugs but reported no problems within the past 12 months. Interestingly, the survey found that among those respondents who currently abstain from once problematic substance use, more than half said that they had quit on their own, another third quit through participation in a twelve-step program, and only about one-tenth quit through a formal substance abuse treatment program.

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Ethnic Differences

Comparisons among ethnic groups in California revealed that African-Americans had the lowest rate of substance abuse problems or need for treatment among the ethnic groups studied. This was due to their lower levels of alcohol-only problems. The survey also found that respondents above 200% of the poverty level had significantly higher rates of alcohol consumption than those below that income level. Thus, the low rate of substance abuse problems among African-Americans may be associated with lower incomes that are in turn associated with lower levels of alcohol consumption.

Employment

National statistics from the 2000 National Household Survey on Drug Abuse^{iv}, (for which individual state-level data has not yet been made available) show that current employment status is highly correlated with rates of use of illicit drugs. Although the rate of drug use is higher among unemployed persons than other employment groups, most users of illicit drugs are employed – 77% of adult users of illicit drugs in 2000 were employed either full or part time.

Substance Abuse Treatment in California

Treatment statistics can often be frustrating to use for policy purposes because they have many gaps. For example, California maintains a federally mandated substance abuse treatment data system for all admissions to substance abuse treatment facilities that are licensed or certified by the State substance abuse agency (CADDs/TEDS).^v In general, facilities included in this data set are those that receive State AOD funds for the provision of treatment services. Physicians' offices are excluded, as are most private facilities in California and most hospitals. The facilities that do submit data allocate about 11% of their treatment capacity to private clients. Perhaps most importantly, voluntary programs such as Alcoholics Anonymous or Narcotics Anonymous are not included in this data collection system, so that this type of therapy, which is very popular, is not included in treatment statistics. As in the rest of the behavioral health industry, a significant portion of substance abuse treatment services are provided by practitioners, institutions, and groups that are not defined as components of the substance abuse treatment system. Yet, while 3% of respondents to the California Household Use Survey reported ever having been in any formal alcohol or drug treatment program, twice as many, 6%, reported having been in a twelve-step program at some time in their lives.

California reported 179,320 admissions to substance abuse treatment facilities for individuals aged 12 and over in 1999, before Proposition 36 became effective.

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The age/sex/ethnicity adjusted admission rate was 656 per 100,000 population aged 12 and over, 8.1% above the national average. Alcohol was the primary substance of abuse at admission for 26.3% of the California admissions. The rate of admissions for individuals with a primary substance of alcohol was 178 per 100,000, was less than two-thirds of the national average rate of 283 per 100,000. It should also be noted that more than half (56.2%) of primary alcohol admissions reported secondary drug use as well, the most frequent of which was marijuana, ranking slightly higher than cocaine and stimulants.

Age, Sex and Ethnicity Adjusted Admission Rates Per 100,000 Population - 1999

	CALIFORNIA	U.S.
Alcohol	178	283
Heroin	184	85
Cocaine	89	87
Marijuana	65	90
Methamphetamine	125	29
Total (Includes All Others)	656	607

The rate of admission to substance abuse treatment facilities in California for some individual substances was substantially above the U.S. average. The most frequently reported primary substance of abuse among California patients was heroin, accounting for 59,362 admissions in 1999, or 33.1% of the total. The rate of admission in California for clients whose primary substance of abuse is heroin is more than double the national average. The rate of admission in California for clients whose primary substance of abuse is methamphetamine/amphetamine is four times the national average. The rate of admission of clients whose primary substance of abuse is alcohol, in contrast, is 62.9% of the national average.

Five substances accounted for the great majority of substance abuse treatment episodes:

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Admissions for Substance Abuse Treatment in California by Primary Substance of Abuse

PRIMARY SUBSTANCE OF ABUSE	NUMBER OF ADMISSIONS	PERCENT OF TOTAL
Heroin	59,362	33.1%
Alcohol	47,136	26.3%
Methamphetamine	30,276	16.9%
Cocaine/Crack	21,506	12.0%
Marijuana	16,841	9.4%
Other Opiates	2,059	1.1%
PCP	843	0.5%
Sedatives	307	0.2%
Tranquilizers	231	0.1%
Hallucinogens	189	0.1%
Inhalants	61	0.0%
Other	509	0.3%
TOTAL	179,320	100.0%

Some findings regarding gender, ethnicity, age, and education help us draw a better picture of those undergoing treatment for substance abuse in California:

Gender: The prevalence of abuse and the number of treatment episodes are higher for men than for women. The California Household Substance Use Survey, found that only 7.1% of females reported ever having had a substance use disorder, compared to 18.3% of males. However, substance abuse among women is rising nationally. It is of note that for one of the five substances for which clients are treated most frequently, stimulants, such as methamphetamine, women had 49.4% of the total number of substance abuse specialty treatment episodes. Women are also relatively numerous among clients treated for abuse of cocaine/crack, accounting for 42.5% of the admissions for treatment of abuse of this substance. In total, females in California accounted for 35.9% of all substance abuse treatment episodes.

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Ethnicity: Patterns of substance abuse treatment episodes also vary significantly by ethnicity. Treatment for stimulant abuse largely involves White - Non-Hispanic clients, who account for 66.7% of all of the treatment episodes for this substance. Among treatment episodes for White clients, heroin accounts for the greatest number of episodes, as it also does for persons of Hispanic origin. There are more episodes for treatment of cocaine/crack abuse among African-American clients than for any other substance. Asians typically have low rates of substance abuse overall, but specific sub-populations with more severe problems exist.

Age: Substance abuse treatment is used predominantly by younger adults: only 3% of treatment clients are aged 55 and older. Almost two-thirds of clients are between 25 and 44 years of age but substance use begins at younger ages. Four-fifths (80%) of treatment episodes were for clients who reported that their age at first use of their primary drug of abuse was 24 years or under.

Education: The majority of individuals admitted for treatment of substance abuse report 12 years of education or more. 4.2% have 16 years of education, 14.0% have 13-15 years of education, indicating some college, and 41.8% report 12 years of education, indicating that they attended school through the end of high school. The most common primary substance of abuse for those with 16 or more years of education is alcohol, accounting for 41% of admissions for this education category; the second most common is heroin and other opiates, accounting for 34%. Among individuals with 11 years or less of education, abuse of heroin and other opiates accounts for the largest portion of admissions, about 30%.

Most treatment episodes in California were for individuals who had had one or more prior treatment episodes; 56.5% of admissions were for clients with one or more prior treatment episodes and 43.5% were for clients with no prior treatment episodes. The primary (current) substance with the lowest proportion of admissions for patients with no prior episodes of treatment (for any substance) is opiates, including heroin; just 23% of clients whose primary substance of abuse was opiates had no prior treatment episodes. About half of the admissions for clients whose primary substance of abuse was alcohol or cocaine/crack had no prior treatment episodes; the corresponding statistic for methamphetamine was 57% reporting no prior treatment.

These observed treatment utilization rates are a product of more than just the epidemiology of substance abuse itself. They are a joint product of the use of these substances among Californians, the availability of treatment services, and a host of socio-economic factors, including law enforcement activity and the

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judicial system, all of which together determine the patterns of substance abuse treatment. As shown, there is little correlation between the rate of use of illicit drugs and the rate of admission for treatment of abuse. For example, previously reported statistics showing that use of alcohol in California is similar to or slightly higher than in the country as a whole sheds little light on the observation that rates of treatment for alcohol abuse are low in California relative to the U.S.

Summary

The major points revealed by these data, all of which were collected prior to the implementation of Proposition 36, are the following:

- Substance abuse directly affects many Californians. In the month preceding the most recent national survey of drug abuse, 18.8% of Californians reported having engaged in binge drinking and 3.2% reported using illicit drugs other than marijuana. Although not all these individuals necessarily require treatment, a California survey using a somewhat narrower sample found that between 4.8% and 8.0% of resident adults were in need of some sort of intervention, based on an assessment of problem use in the prior twelve months.
- Substance abuse treatment is provided in both formal and informal settings both of which need to be considered to get a full picture. The data presented from the TEDS/CADDs system reflects admissions to substance abuse treatment facilities which are part of the formal substance abuse treatment system. However, a very large quantity of treatment is provided by the "informal" treatment system, which includes organizations like Alcoholics Anonymous and Narcotics Anonymous. The California survey data found that among those who currently abstain from once problematic substance use, more than half quit on their own, another third quit through participation in a twelve-step program, and only about one-tenth quit through a formal treatment program.
- Although more people in California with a substance use disorder report that the abuse involves alcohol than any other drug, there are more admissions to formal substance abuse treatment programs in California for heroin than for any other substance. We do not know how many alcohol abusers should have been treated.

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SOURCES

ⁱ Substance Abuse and Mental Health Services Administration, Office of Applied Studies, National Household survey on Drug Abuse, *State Tables of Model-Based Estimates* from 1999 Survey.

ⁱⁱ State of California, Health and human Services Agency, Department of Alcohol and Drug Programs, Office of Applied Research and Analysis *California Substance Use Survey (CAHSUS) Summary Report* Publication No. 99-7035 November 1999.

ⁱⁱⁱ It is important to note that this 12% figure is conservative because it includes only respondents who used a substance within the past year.

^{iv} Substance Abuse and Mental Health Services Administration. *Summary of Findings from the 2000 National Household Survey on Drug Abuse*. Office of Applied Studies, NHSDA Series H-13, DHHS Publication No. (SMA) 01-3549. Rockville, MD, 2001

^v Substance Abuse and Mental Health Services Administration, Office of Applied Studies. *Treatment Episode Data Set (TEDS) 1994 – 1999. National admissions to Substance Abuse Treatment Services*, DASIS series S-14 DHHS Publication No. (SMS) 01-3350; Rockville, MD 2001. Data also available on University of Michigan ISR WWW site.